

Inventions & Innovation Project Abstract

Multi-Rotor Micro Particle Generator

Emulsion Technologies Corporation is developing the many uses of a proprietary device entitled the Multi-Rotor Micro Particle Generator. Emulsion Technologies Corporation retains the rights to this proprietary and revolutionary new method of mechanically creating the smallest particle emulsions known today. This mechanical generator incorporates a novel approach to continuous emulsification processing of any type of fine particle homogeneous suspensions particularly in the field of ethanol production and Biofuels, Bio-diesel, E-diesel, Aqua-Diesel, PuriNOX, Hydro-Diesel, and Clean-fuel blending.

Although the Emulsion Technologies Corporation was formed on April 22nd, 2002, the actual project began in March 1998. An investigative expedition to Russia was prompted by and understanding that a mechanical device existed there that had the ability to create an ultra-fine emulsion. It was developed during the Cold War for the specific purpose of creating an extremely fine photographic emulsion to produce unusually fine resolution overhead reconnaissance satellite photography. The emulsifier was exploited for other possible uses, one of which was the cell disruption process of multiple grains for production of fine Russian vodka. Applications for other processes included the reconstitution, homogenization and pasteurization of powdered milk products for the liquid dairy industry in Kazan, Russia. Pharmaceutical uses included the extraction of enzymes from plant matter for use in manufacturing drugs. The production of a stable mayonnaise product became another lucrative process application. The project manager, Dr. Boris Kessel, has invented a second and third emulsifier that incorporates a very novel approach to an enhanced emulsification process and remains a well-established departure from the old device with more efficient results. Emulsion Technologies Corporation will focus on the Bioenergy and Biofuels industries because of the current national attention given to less dependency on foreign petroleum and the latest emphasis put on renewable energy.



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